

Serial No. 09/620,185
Art Unit No. 2134

REMARKS

Claims 1-15 are currently pending in the patent application. The Examiner has rejected Claims 1-4, 6-7, 9-11, 13 and 15 under 35 USC 103 as being unpatentable over Younger in view of Kovacs; Claims 8 and 14 as being unpatentable over Younger in view of Kovacs and further in view of Inomata; and, Claims 5 and 12 as being unpatentable over Younger in view of Kovacs and further in view of Chan. For the reasons set forth below, and in view of the amendments presented herein, Applicants believe that the claims are allowable over the cited art.

The present invention provides a chip card, method and program storage device for allowing secure, post-initialization personalization of a chip card for multiple chip card applications. By providing at least one application descriptor and a plurality of personalization descriptors separately for each application during initialization, the invention sets aside relative memory addresses to be used during personalization that allow easy, secure personalization without the concern that one application could access or overwrite personalization

Serial No. 09/620,185
Art Unit No. 2134

information for a different application. Applicants have amended the language of the independent claims.

The Examiner has cited the Younger patent as the primary reference in rejecting all of the pending claims. The Younger patent is directed to an early (1986) smart card apparatus and programming method for providing one application on a smart card. Younger utilizes a data dictionary that serves as a template for every smart card which is created for a particular application (see: Col. 4, lines 12-14). The data dictionary includes a list of all of the information which is to be found on the smart card, including the smart card program 50, the data dictionary itself 52, the user information 54, and "trans. information 56", the latter of which does not appear to be defined by the Younger patent. As detailed in Col. 4, lines 4-63, the data dictionary lists the definitions of data fields for system, application and user data. All of the fields and memory locations are pre-defined for the smart card. While user data will not be filled in before a personalization step, Younger pre-defines where that data will go, and how much and what kind of user data will be stored for the one smart card application.

Serial No. 09/620,185

Art Unit No. 2134

Applicants respectfully disagree with the Examiner's interpretation of the Younger patent teachings. The Examiner concludes that the Younger data dictionary is analogous to the claimed application descriptor. However, there is nothing in Younger which either teaches or suggests writing at least one application descriptor for each chip card application to the data memory of the chip card, wherein the application descriptor designates the chip card application and comprises details of the memory address of a first personalization descriptor in a list of a plurality of personalization descriptors associated with the application. Applicants note that the application descriptor of the present invention is defined in the Specification (see: page 8, lines 15 et seq) and is not a "generic" term to refer to any data about an application. The application descriptor which is claimed uniquely designates the chip card application and includes details about the personalization descriptors for the application. Younger simply lists what data is already stored for a single application on a chip card and what pre-defined fields are set aside to be completed for personalization. Younger does not provide an application descriptor as claimed. Further, Younger does not teach or suggest that an application descriptor have an

Serial No. 09/620,185
Art Unit No. 2134

associated list of a plurality of personalization descriptors and include the memory address of a first personalization descriptor from that list, as further discussed below.

Applicants note that the Examiner has cited the passage from Col. 4 regarding the data dictionary against both the application descriptor and the personalization descriptor of the claims. Applicants respectfully assert that the two claim limitations are distinct, that neither the application descriptor nor the personalization descriptor is taught or suggested by the Younger data dictionary, and that a *prima facie* case of obviousness has not been set forth by the Examiner since not every claim limitation has been independently addressed (In re Wilson, 424 F. 2d 1382, 165 U.S.P.Q. 494 (C.C.P.A. 1970)). Applicants request clarification of how the two distinct claim features are rendered obvious by the same single set of teachings.

With regard to the claim features of writing at least one personalization descriptor to the data memory of the chip card, transmitting personalizing data for a chip card application to the chip card, writing personalizing data to the data memory of the chip card at the memory address for the first personalization descriptor indicated by the

Serial No. 09/620,185
Art Unit No. 2134

details in the application descriptor, transmitting the details of the relative memory address of the next successive personalization descriptor taken from the first personalization descriptor to the application descriptor so that the next successive personalization descriptor is then assigned to the application descriptor, and repeating the steps of personalization for all of the personalizing data which has to be transmitted for each chip card application, the Examiner has concluded that Younger provides teachings which obviate the claim language. Applicants respectfully disagree. Younger teaches that all memory locations of a smart card be pre-defined, that the smart card application be loaded, that a data dictionary list the loaded data and the data locations which will store the user data, and that user data be loaded to the pre-defined locations (see: Col. 9, line 63-Col. 9, line 11). Younger does not teach or suggest initialization steps of writing an application descriptor and writing a plurality of personalization descriptors comprising relative memory locations for each application, as is taught and claimed. Further, Younger does not teach separate personalization steps of transmitting/receiving personalizing data, writing the personalizing data to a memory address of a personalization

Serial No. 09/620,185
Art Unit No. 2134

descriptor indicated by an application descriptor, transmitting a memory address of a next successive personalization descriptor and repeating the process until all personalization data has been transmitted for all applications.

The Examiner has acknowledged that Younger fails to teach that the personalization descriptor comprises details of the memory address of the next successive personalization descriptor, and cites the Kovacs article against that claim language. Applicants must first point out that the Examiner has used Younger to reject the claim language "transmitting the details of the memory address of the next successive personalization descriptor taken from the first personalization descriptor to the application descriptor" (see: top of page 3 of the office action); yet, later acknowledges that Younger does not teach that the first personalization descriptor has those details. Clearly, if Younger does not teach or suggest that the first personalization descriptor have that information, then Younger cannot obviate the transmitting and use of that information. Applicants respectfully request clarification of this inconsistency.

Serial No. 09/620,185

Art Unit No. 2134

Applicants have reviewed the Kovacs article and its teachings regarding linked lists. Applicants do not agree with the Examiner, however, that one having skill in the art would be motivated by Kovacs to modify Younger to include linked lists. The Younger smart card has one application and fixed memory locations for all data related to that one application. There is simply no motivation in Younger, or Kovacs, for a linked list to be included in the Younger smart card. All memory locations are pre-defined and sequential, so that there would be no need to link the memory locations in the Younger smart card. The Examiner states that "it would have been obvious....to utilize Kovacs' method of storing the details of the memory addresses of successive objects because it offers the advantage of simple allocation and deallocation within a data structure." However, one skilled in the art would not, upon reading Younger, see any need to store such details. The data structure of the Younger smart card is pre-defined with all memory locations being filled in for the single smart card application. Younger writes the initialization data one time and then writes the personalization data one time. A skilled artisan would not be motivated to deallocate and reallocate memory locations in Younger, since

Serial No. 09/620,185
Art Unit No. 2134

all data fields are written one time and remain fixed for the smart card application. With only one smart card application and with fixed memory locations being pre-defined and completely filled/written to, one simply would not be motivated to modify Younger to allow reallocation of memory.

Applicants note that the claim limitation "wherein the memory addresses for the personalization descriptors associated with each chip card application are distinct from the memory addresses of the personalization descriptors associated with other chip card applications" has been added to the independent claims. Clearly, the Younger patent teachings regarding writing all necessary data onto a smart card at pre-defined memory locations for a single smart card application neither teach nor suggest the amendment language. Applicants believe that one having skill in the art would not logically combine the teachings of Younger and Kovacs, and that any combination of Younger and Kovacs would not result in the invention as claimed. Applicants believe that the Examiner has not made out a *prima facie* case of obviousness and respectfully request reconsideration of the rejections of Claims 1-4, 6-7, 9-11, 13 and 14 based on Younger in view of Kovacs.

Serial No. 09/620,185
Art Unit No. 2134

Applicants have reviewed the additionally cited Inomata and Chan patents. Neither Inomata nor Chan provides the teachings which are missing from the combination of Younger and Kovacs. The Inomata patent is cited for teaching incrementing a counter each time data is written to a memory device. Applicants again note that Younger provides pre-defined memory locations which are written to one time only. Clearly, therefore it would not be logical to provide a counter that is incremented each time memory is written to, since the count would always be "1". The "counter" which is listed in the data dictionary of Younger is not a memory write counter, it is a mis-operation counter defining the number of times a user can enter an incorrect password (i.e., authenticated against the personalization data) before being denied access to the smart card application. Such is not the same as counting memory writes. Since none of the cited art teaches or suggests the incrementing step, it cannot be maintained that the language of Claims 8 and 14 is obviated.

The Chan patent has been cited for teaching "...personalizing data being checked using information included in the application descriptor". Applicants first point out that none of the cited art teaches or suggests the

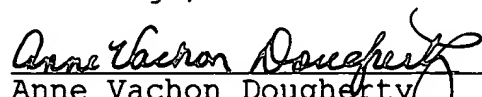
Serial No. 09/620,185
Art Unit No. 2134

claimed application descriptors. What Chan teaches at Col. 12, lines 5-13, is that an application compares entered authentication data (i.e., the signature) against stored personalization data. The Chan process occurs once a personalization step has been completed. In contrast, the present invention is teaching and claiming that the personalization step can only be completed if the characteristics of the personalizing data to be transmitted for storage at the chip card comply with the information included in an application descriptor. Clearly, since none of the cited art teaches or suggests the claimed application descriptor or the use of same during personalization, it cannot be maintained that the language of Claims 5 and 12 is obviated.

Based on the foregoing amendments and remarks, Applicants respectfully request entry of the amendments, reconsideration of the amended claim language in light of the remarks, withdrawal of the rejections, and allowance of the claims.

Respectfully submitted,
H. Droege, et al

By:


Anne Vachon Dougherty
Registration No. 30,374
Tel. (914) 962-5910